

IN THE CLAIMS

The following claim listing will replace all prior claim listings.

1 - 36. (Cancelled.)

37. (New.) A topical pharmaceutical and/or cosmetic product comprising first and second emulsion formulations, wherein both emulsion formulations have a viscosity of 5,000 cps to 15,000 cps and comprise:
- (i) a water-based carrier base, the water-based carrier bases of the first and second emulsion formulations having substantially the same lipophilicity,
 - (ii) a non-aqueous phase, and
 - (iii) at least one active ingredient, wherein the active ingredient in the first and second emulsions are different; wherein
the first emulsion formulation includes a non-swellaable and cross-linked polymeric delivery system comprised of polymers capable of entrapping and controlling the release of at least one active ingredient, wherein the polymeric delivery system comprises about 5% to about 60% by weight of active ingredient, with the proviso that the active ingredient is not a retinoid;
the pharmaceutical and/or cosmetic product further comprising storage means whereby said formulations are stored separately prior to dispense, together with dispense means which permit said formulations to be dispensed from said storage means.
38. (New.) The pharmaceutical and/or cosmetic product of claim 37 wherein the polymeric delivery system is selected from the group consisting of:
- (a) solid microporous micro-particle copolymers of allyl methacrylate and ethylene glycol dimethacrylate,
 - (b) compounds made by suspension polymerization of lauryl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (c) compounds made by suspension polymerization of methyl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (d) solid particles composed of a cross-linked copolymer of monoethylenically unsaturated monomers and polyethylenically unsaturated monomers and having a cross-linking density from 20% to 80%, and

(e) solid particles composed of polystyrene and divinylbenzene, wherein said particles contain a continuous noncollapsible network of pores open to the exterior of said particles, are substantially spherical in shape, and have an average diameter of about 1 micron to about 100 microns, a total pore volume of about 0.01 cc/g to about 4.0 cc/g, a surface area of about 1 m²/g to about 500 m²/g, and an average pore diameter of about 0.001 micron to about 3.0 microns.

39. (New.) The pharmaceutical and/or cosmetic product according to claim 38 wherein the storage means comprises side-by-side chambers, each equipped with a dispense valve, said valves being operable by a single actuator or by adjacently disposed actuators and, further wherein, the dispense means are adapted to permit dispense of the first emulsion formulation in a specific ratio to the second emulsion formulation.

40. (New.) The pharmaceutical and/or cosmetic product of claim 39 further comprising a closure that (i), prevents depression of the actuator or actuators, or (ii), covers or seals an orifice in the actuator or actuators.

41. (New.) The pharmaceutical and/or cosmetic product of claim 38 wherein the first emulsion formulation is an aqueous topical cream or gel carrier base containing an antibacterial and/or keratolytic agent that is not a retinoid incorporated into a polymeric delivery system and the second emulsion formulation is an aqueous carrier base having substantially the same lipophilicity as the first emulsion formulation and includes a topical antibiotic.

42. (New.) The pharmaceutical and/or cosmetic product of claim 41 wherein the keratolytic agent is salicylic acid.

43. (New.) The pharmaceutical and/or cosmetic product according to claim 41 wherein the antibacterial agent is an organic peroxide.

44. (New.) The pharmaceutical and/or cosmetic product according to claim 43 wherein the organic peroxide is benzoyl peroxide.

45. (New.) The polymeric delivery system of claim 41 wherein the topical antibiotic is selected from the group consisting of erythromycin, clindamycin or a tetracycline.

46. (New.) The pharmaceutical and/or cosmetic product of claim 45 wherein the antibacterial and/or keratolytic agent is benzoyl peroxide and the topical antibiotic is clindamycin.

47. (New.) The pharmaceutical and/or cosmetic product of claim 38 wherein the first emulsion formulation comprises as active ingredients a depigmenting agent and a keratolytic agent.

48. (New.) The pharmaceutical and/or cosmetic product of claim 38 wherein the first emulsion formulation includes a hair growth promoter incorporated in the polymeric delivery system.

49. (New.) The pharmaceutical and/or cosmetic product of claim 38 wherein the lipophilicities of water-based carrier bases of the first and second emulsion formulations differ by 5% or less.

50. (New.) The pharmaceutical and/or cosmetic product of claim 49 wherein the lipophilicities of water-based carrier bases of the first and second emulsion formulations differ by 2.5% or less.

51. (New.) A topical pharmaceutical and/or cosmetic product comprising first and second emulsion formulations, wherein both emulsion formulations have a viscosity of 5,000 cps to 15,000 cps and comprise:

- (i) a water-based carrier base, the water-based carrier bases of the first and second emulsion formulations having substantially the same lipophilicity,
- (ii) a non-aqueous phase, and
- (iii) at least one active ingredient, wherein the active ingredient in the first and second emulsions are different; wherein the first emulsion formulation includes a non-swellable and cross-linked polymeric delivery system comprised of polymers capable of entrapping

and controlling the release of at least one active ingredient, wherein the polymeric delivery system comprises about 1% to about 20% of a retinoid;

the pharmaceutical and/or cosmetic product further comprising storage means whereby said formulations are stored separately prior to dispense, together with dispense means which permit said formulations to be dispensed from said storage means.

52. (New.) The pharmaceutical and/or cosmetic product of claim 51 wherein the polymeric delivery system is selected from the group consisting of:

(a) solid microporous micro-particle copolymers of allyl methacrylate and ethylene glycol dimethacrylate,

(b) compounds made by suspension polymerization of lauryl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,

(c) compounds made by suspension polymerization of methyl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,

(d) solid particles composed of a cross-linked copolymer of monoethylenically unsaturated monomers and polyethylenically unsaturated monomers and having a cross-linking density from 20% to 80%, and

(e) solid particles composed of polystyrene and divinylbenzene, wherein said particles contain a continuous noncollapsible network of pores open to the exterior of said particles, are substantially spherical in shape, and have an average diameter of about 1 micron to about 100 microns, a total pore volume of about 0.01 cc/g to about 4.0 cc/g, a surface area of about 1 m²/g to about 500 m²/g, and an average pore diameter of about 0.001 micron to about 3.0 microns.

53. (New.) The pharmaceutical and/or cosmetic product according to claim 51 wherein the storage means comprises side-by-side chambers, each equipped with a dispense valve, said valves being operable by a single actuator or by adjacently disposed actuators and, further wherein, the dispense means are adapted to permit dispense of the first emulsion formulation in a specific ratio to the second emulsion formulation.

54. (New.) The pharmaceutical and/or cosmetic product of claim 53 further comprising a closure that (i), prevents depression of the actuator or actuators, or (ii), covers or seals an orifice in the actuator or actuators.
55. (New.) The pharmaceutical and/or cosmetic product of claim 52 wherein the first emulsion formulation includes an antibacterial and a retinoid, the retinoid incorporated into the polymeric delivery system, and the second emulsion formulation includes a topical antibiotic.
56. (New.) The pharmaceutical and/or cosmetic product according to claim 55 wherein the retinoid is selected from the group consisting of retinol, retinoic acid, tazarotene and adapalene.
57. (New.) The pharmaceutical and/or cosmetic product of claim 55 wherein the antibacterial agent is an organic peroxide.
58. (New.) The pharmaceutical and/or cosmetic product of claim 57 wherein said organic peroxide is benzoyl peroxide.
59. (New.) The pharmaceutical and/or cosmetic product of claim 55 wherein the antibiotic is selected from the group consisting of erythromycin, clindamycin or a tetracycline.
60. (New.) The pharmaceutical and/or cosmetic product according to claim 59 wherein the first emulsion formulation includes a retinoid and an antibacterial that is benzoyl peroxide, and the topical antibiotic is clindamycin.
61. (New.) The pharmaceutical and/or cosmetic product according to claim 52 wherein the first emulsion formulation further comprises an anti-fungal agent and either or both of the retinoid and anti-fungal agent are incorporated into the polymeric delivery system.
62. (New.) The pharmaceutical and/or cosmetic product of claim 61 wherein the anti-fungal agent is selected from the group consisting of undecilenic acid, miconazole,

in the form of a base or nitrate, ketoconazole, iconazole, clotrimazole and the retinoid is either retinol or retinoic acid.

63. (New.) The pharmaceutical and/or cosmetic product of claim 52 further comprising, as an active ingredient in the first emulsion formulation, a depigmenting agent, wherein either or both of the depigmenting agent and retinoid are incorporated into the polymeric delivery system.

64. (New.) The pharmaceutical and/or cosmetic product of claim 63 further comprising, as an active ingredient in the first emulsion formulation, a corticosteroid, wherein either or both of the retinoid or the corticosteroid are incorporated into the polymeric delivery system.

65. (New.) The pharmaceutical and/or cosmetic product of claim 52 further comprising, as an active ingredient in the first emulsion formulation, a corticosteroid, wherein either or both of the corticosteroid and the retinoid are incorporated into the polymeric delivery system.

66. (New.) The pharmaceutical and/or cosmetic product of claim 52 further comprising, as an active ingredient in the first emulsion formulation, a hair growth promoter wherein either or both of the retinoid and hair growth promoter are incorporated into the polymeric delivery system.

67. (New.) The pharmaceutical and/or cosmetic product of claim 52 wherein the lipophilicities of the carrier bases of the first and second emulsion formulations differ by 5% or less.

68. (New.) The pharmaceutical and/or cosmetic product of claim 67 wherein the lipophilicities of the carrier bases of the first and second emulsion formulations differ by 2.5% or less.

69. (New.) A topical pharmaceutical and/or cosmetic product comprising first and second emulsion formulations, wherein each emulsion formulation has a viscosity of 5,000 cps to 15,000 cps and comprises:

- (i) a water-based carrier base, the water-based carrier bases of the first and second emulsion formulations having lipophilicities that differ by 10% or less,
- (ii) a non-aqueous phase, and
- (iii) at least one active ingredient, wherein the active ingredients in the first and second emulsions are different;
- (iv) a non-swellaable and cross-linked polymeric delivery system comprised of polymers capable of entrapping and controlling the release of at least one active ingredient, the polymeric delivery system selected from the group consisting of ;
 - (a) solid microporous micro-particle copolymers of allyl methacrylate and ethylene glycol dimethacrylate,
 - (b) compounds made by suspension polymerization of lauryl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (c) compounds made by suspension polymerization of methyl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (d) solid particles composed of a cross-linked copolymer of monoethylenically unsaturated monomers and polyethylenically unsaturated monomers and having a cross-linking density from 20% to 80%, and
 - (e) solid particles composed of polystyrene and divinylbenzene, wherein said particles contain a continuous noncollapsible network of pores open to the exterior of said particles, are substantially spherical in shape, and have an average diameter of about 1 micron to about 100 microns, a total pore volume of about 0.01 cc/g to about 4.0 cc/g, a surface area of about 1 m²/g to about 500 m²/g, and an average pore diameter of about 0.001 micron to about 3.0 microns; wherein
 - the first emulsion formulation includes about 1% to about 20% of a retinoid;
 - the second emulsion formulation includes a topical antibiotic; andfurther wherein the pharmaceutical and/or cosmetic product comprises storage means whereby said formulations are stored separately prior to

dispense, together with dispense means which permit said formulations to be dispensed from said storage means.

70. (New.) The pharmaceutical and/or cosmetic product according to claim 69 wherein the storage means comprises side-by-side chambers, each equipped with a dispense valve, said valves being operable by a single actuator or by adjacently disposed actuators, and further wherein, the dispense means are adapted to permit dispense of the first emulsion formulation separately from dispense of the second emulsion formulation and in a specific ratio to the second emulsion formulation.
71. (New.) The pharmaceutical and/or cosmetic product of claim 70 further comprising a closure that (i), prevents depression of the actuator or actuators, or (ii), covers or seals an orifice in the actuator or actuators.
72. (New.) The pharmaceutical and/or cosmetic product according to claim 69 wherein the dispense means is adapted to dispense the first emulsion formulation and the second emulsion formulation through separate orifices.
73. (New.) The pharmaceutical and/or cosmetic product of claim 69 wherein the first emulsion formulation includes an antibacterial.
74. (New.) The pharmaceutical and/or cosmetic product of claim 73 wherein the antibacterial agent is benzoyl peroxide.
75. (New.) The pharmaceutical and/or cosmetic product of claim 69 wherein the topical antibiotic is selected from the group consisting of erythromycin, clindamycin, and the tetracyclines.
76. (New.) The pharmaceutical and/or cosmetic product of claim 75 wherein the topical antibiotic is incorporated in the polymeric delivery system of the second emulsion formulation.

77. (New.) The pharmaceutical and/or cosmetic product of claim 69 wherein the retinoid is selected from the group consisting of retinol, retinoic acid, tazarotene and adapalene.

78. (New.) The pharmaceutical and/or cosmetic product of claim 77 wherein the retinoid is incorporated in the polymeric delivery vehicle of the first emulsion formulation.

79. (New.) The pharmaceutical and/or cosmetic product of claim 78 wherein the first emulsion formulation includes an antibacterial.

80. (New.) The pharmaceutical and/or cosmetic product of claim 79 wherein the antibacterial is an organic peroxide.

81. (New.) The pharmaceutical and/or cosmetic product of claim 80 wherein the organic peroxide is benzoyl peroxide.

82. (New.) The pharmaceutical and/or cosmetic product of claim 79 wherein the antibacterial is incorporated in the polymeric delivery system of the first emulsion formulation.

83. (New.) The pharmaceutical and/or cosmetic product of claim 69 wherein the retinoid and the topical antibiotic are incorporated in the respective polymeric delivery systems.

84. (New.) The pharmaceutical and/or cosmetic product of claim 69 wherein the lipophilicities of the water-based carrier bases of the first and second emulsion formulations differ by 5% or less.

85. (New.) The pharmaceutical and/or cosmetic product of claim 84 wherein the lipophilicities of the water-based carrier bases of the first and second emulsion formulations differ by 2.5% or less.

86. (New.) A topical pharmaceutical and/or cosmetic product comprising first and second emulsion formulations, wherein each emulsion formulation has a viscosity of 5,000 cps to 15,000 cps and comprises:
- (i) a water-based carrier base, the water-based carrier bases of the first and second emulsion formulations having lipophilicities that differ by 10% or less,
 - (ii) a non-aqueous phase, and
 - (iii) at least one active ingredient, wherein the active ingredient in the first and second emulsions are different;
 - (iv) a non-swellable and cross-linked polymeric delivery system comprised of polymers capable of entrapping and controlling the release of at least one active ingredient, the polymeric delivery system selected from the group consisting of ;
 - (a) solid microporous micro-particle copolymers of allyl methacrylate and ethylene glycol dimethacrylate,
 - (b) compounds made by suspension polymerization of lauryl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (c) compounds made by suspension polymerization of methyl methacrylate and ethylene glycol dimethacrylate using a peroxide as a catalyst,
 - (d) solid particles composed of a cross-linked copolymer of monoethylenically unsaturated monomers and polyethylenically unsaturated monomers and having a cross-linking density from 20% to 80%, and
 - (e) solid particles composed of polystyrene and divinylbenzene, wherein said particles contain a continuous noncollapsible network of pores open to the exterior of said particles, are substantially spherical in shape, and have an average diameter of about 1 micron to about 100 microns, a total pore volume of about 0.01 cc/g to about 4.0 cc/g, a surface area of about 1 m²/g to about 500 m²/g, and an average pore diameter of about 0.001 micron to about 3.0 microns; wherein

the first emulsion formulation includes about 5% to about 60% of an active ingredient that is not a retinoid;

the second emulsion formulation includes about 5% to about 60% of an active ingredient that is not a retinoid and that is different from the active ingredient in the first emulsion formulation; and further wherein the pharmaceutical and/or cosmetic product comprises storage means whereby said formulations are stored separately prior to dispense, together with dispense means which permit said formulations to be dispensed from said storage means.

87. (New.) The pharmaceutical and/or cosmetic product according to claim 86 wherein the storage means comprises side-by-side chambers, each equipped with a dispense valve, said valves being operable by a single actuator or by adjacently disposed actuators and, further wherein, the dispense means are adapted to permit dispense of the first emulsion formulation separately from dispense of the second emulsion formulation and in a specific ratio to the second emulsion formulation.

88. (New.) The pharmaceutical and/or cosmetic product of claim 87 further comprising a closure that (i), prevents depression of the actuator or actuators, or (ii), covers or seals an orifice in the actuator or actuators.

89. (New.) The pharmaceutical and/or cosmetic product according to claim 86 wherein the dispense means is adapted to dispense the first emulsion formulation and the second emulsion formulation through separate orifices.

90. (New.) The pharmaceutical and/or cosmetic product according to claim 86 wherein the active ingredients of the first and second emulsion formulations are incorporated in the respective polymeric delivery systems.

91. (New.) The pharmaceutical and/or cosmetic product according to claim 86 wherein the lipophilicities of the water-based carrier bases of the first and second emulsion formulations differ by 5% or less.

92. (New.) The pharmaceutical and/or cosmetic product according to claim 91 wherein the lipophilicities of the water-based carrier bases of the first and second emulsion formulations differ by 2.5% or less.